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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,874	07/11/2005	Angelo Benvenuti	6575/PCT	7897

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EXAMINER

LEE, LAURA MICHELLE

ART UNIT	PAPER NUMBER
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3724

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11/29/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/541,874

Applicant(s)

BENVENUTI ET AL.

Examiner

Laura M. Lee

Art Unit

3724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 14, 25, 27-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13, 15-24, 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 7/11/2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/11/2005.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the amendment filed 9/10/2007.

Election/Restrictions

2. Claims 14, and 27-43 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/10/2007.
3. Applicant's election without traverse of claims 1-13, 15-26, 44 in the reply filed on 9/10/2007 is acknowledged.
4. Furthermore, upon examination of the elected claims, claim 25 was also found not directed to elected species and has also been withdrawn from the examiner claims.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-4, 6, 9, 11 13, 15-16, 19, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Perini (GB 2137918). Perini discloses a

device (Figure 1) to eliminate trimmings or scraps from series of products comprising at least one continuous movable flexible member (chain, 38) carrying a series of contact members (lugs, 40) for the products (R) aligned with one another, a section of said movable flexible member (4) being devoid of said contact members (40x) to allow trimmings (Rx, Ry) to fall (Figure 4); at least one longitudinal supporting element (belt, 5) for the products, parallel to said movable flexible member (38), a reciprocal position of said flexible member and of said longitudinal supporting element being such that the products advance in contact with the contact members (40) of the longitudinal supporting member and with the longitudinal supporting element (5; at least one pusher (advancing mechanism; not shown; see page 1, lines 89-104) to insert the series of products (R) with respective trimmings (Rx, Ry) between said flexible member (38) and said longitudinal supporting element (5); wherein said flexible member is controlled with a variable speed (continuous or intermittent movement be adjusted and phased in accordance with the gap between the advancing rolls) to carry the section thereof devoid of contact members (40x) every time to the level of the tail and head trimmings (Rx, Ry) of two consecutive series of products (R) (see page 2, lines 63-80).

In regards to claim 2, Perini discloses that the longitudinal supporting element (5) is fixed (to rollers 7 and 10).

In regards to claim 3, Perini disclose that said continuous flexible member (38) has at least one first contact member (before 40x) designed to grasp at least a last product (before Rx) of each series and make the last product advance.

In regards to claim 4, Perini discloses wherein said continuous flexible member (38) has at least one second contact member (after 40x) designed to grasp at least a first product of each series (after Ry) and make the first product advance.

In regards to claim 6, Perini discloses wherein said flexible member (38) is controlled at a variable speed (continuous or intermittent movement be adjusted and phased in accordance with the gap between the advancing rolls; page 2, lines 63-80) to accelerate at least a last product (before Rx) of each series with respect to the pusher (advancing mechanism there behind. The chain travels at an average speed greater than the roll advancing speed (page 2, line 65-66), therefore when the control of the roll changes from the advancing mechanism to the chain, its speed increases, of which there is a change in acceleration.

In regards to claim 9, Perini discloses wherein one or more of said contact members (40) disposed at each end of a series of contact members (40) carried by the flexible member (38), adjacent to said portion of the flexible member (38) devoid of contact members (40x), can be operated to have a grasping effect of the products (R) in contact therewith (see Figures 1 and 3).

In regards to claim 11, Perini discloses wherein the contact members (40) designed to grasp the products have a movable portion. The whole contact member is a movable portion about the chain, 38.

In regards to claim 13, Perini discloses wherein said flexible member (38) and said longitudinal supporting element (5) are arranged one above the other (see Figure 3).

In regards to claim 15, Perini discloses wherein said flexible member (38) is laterally staggered with respect to said longitudinal supporting element (5)(see Figure 3).

In regards to claim 16, Perini discloses wherein said longitudinal supporting element (5) is positioned under said flexible member (38) (see Figure 3).

In regards to claim 19, Perini discloses wherein said flexible member (38) includes a pair of parallel chains (38 and 39), one of said chains (38) being provided with a plurality of intermediate contact members (40), said intermediate contact members (40) being arranged in a laterally staggered position with respect to said longitudinal supporting element (5).

In regards to claim 26, Perini discloses wherein said products are rolls (R) obtained from cutting a log (B).

7. Claims 1-5, 7-11, 13, 15-19, and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Wierschke (U. S. Patent 5,458,033). Wierschke discloses a device (Figure 2) to eliminate trimmings or scraps from series of products comprising at least one continuous movable flexible member (i.e. belts, 24/25/26) carrying a series of contact members (i.e. pads, 27/28) for the products (R) aligned with one another, a section of said movable flexible member (4) being devoid of said contact members (see Figure 2, not numbered) to allow trimmings (Au, Ad) to fall (Figures 8A-8L); at least one longitudinal supporting element (rails, 15a/15b) for the products, parallel to said movable flexible member (i.e.

24/25/26), a reciprocal position of said flexible member and of said longitudinal supporting element being such that the products advance in contact with the contact members (i.e. 27/28) of the longitudinal supporting member and with the longitudinal supporting element (15a/15b); at least one pusher (pusher, 17) to insert the series of products (R) with respective trimmings (Au, Ad) between said flexible member (i.e. 24/25/26) and said longitudinal supporting element (15a/15b); wherein said flexible member (i.e. 24/25/26) is controlled with a variable speed (phasing; col. 4 lines 46-50) to carry the section thereof devoid of contact members every time to the level of the tail and head trimmings (Au, Ad) of two consecutive series of products (R) (col. 5, lines 6-35).

In regards to claim 2, Wierschke discloses that the longitudinal supporting element (15a/15b) is fixed (to arms 21).

In regards to claim 3, Wierschke disclose that said continuous flexible member (i.e. 24/25/26) has at least one first contact member (i.e. a first foraminous portion of 27/28) designed to grasp at least a last product (Ru) of each series and make the last product advance. (Figure 8A-8L)

In regards to claim 4, Wierschke discloses wherein said continuous flexible member (i.e. 24/25/26) has at least one second contact member (i.e. a second foraminous portion of 27/28) designed to grasp at least a first product of each series (Rd) and make the first product advance. (Figure 8A-8L).

In regards to claim 5, Wierschke discloses wherein at least some of the contact members (i.e. 27/28) are provided with a contact surface for the products

having a low friction coefficient (low is a relative term), to allow said products to slide with respect to said at least one longitudinal supporting element (15a/15b).

In regards to claim 7, Wierschke discloses wherein said flexible member (i.e. 24/25/26) is controlled at a variable speed to accelerate, and optionally subsequently decelerate at least a first product of each series with respect to a subsequent product (col. 4, lines 48-50; col. 5, lines 25-35).

In regards to claim 8, Wierschke discloses wherein said flexible member (i.e. 24/25/26) is controlled to advance at a lower speed or to stop during an interval of time between arrival of a first product and arrival of a last product of each series, during said interval of time the products being pushed by said pusher (17) and sliding along the flexible member (i.e. 24/25/26) resting on the contact members (15a/15b).

In regards to claim 9, Wierschke discloses wherein one or more of said contact members (i.e. 27/28) disposed at each end of a series of contact members carried by the flexible member (i.e. 24/25/26), adjacent to said portion of the flexible member devoid of contact members, can be operated to have a grasping effect of the products (R) in contact therewith (see Figures 8A-8L).

In regards to claim 10, Wierschke discloses wherein said contact members (alternatively mechanical fingers; see col. 6, lines 8-15) deigned to grasp said products (R) are mounted movable (pinching direction), with respect to the flexible member which carries the contact members at least in a direction essentially orthogonal to said flexible member.

In regards to claim 11, Wierschke discloses wherein the contact members (i.e. 27/28) designed to grasp the products have a movable portion. The whole contact member is a movable portion about the belts 24/25/26.

In regards to claim 12, Wierschke discloses wherein

In regards to claim 13, Wierschke discloses wherein said flexible member (i.e. 24/25/26) and said longitudinal supporting element (15a/15b) are arranged one above the other (see Figure 4/5).

In regards to claim 15, Wierschke discloses wherein said flexible member (i.e. 24/25/26) is laterally staggered with respect to said longitudinal supporting element (15a/15b).

In regards to claim 16, Wierschke discloses wherein said longitudinal supporting element (15a/15b) is positioned under said flexible member (i.e. 24/25/26).

In regards to claim 17, Wierschke discloses wherein said flexible member (i.e. 24/25/26) is controlled to be accelerated synchronously with a position of said pusher (17), to distance a last product (Ru) of each series from the pusher there behind (col. 4, lines 48-50).

In regards to claim 18, Wierschke discloses wherein said flexible member (i.e. 24/25/26) is controlled to be accelerated synchronously with a position of said pusher (17), to distance a first product (Rd) of each series at least temporarily from a subsequent product (Figure 8B).

In/ regards to claim 19, Wierschke discloses wherein said flexible member (i.e. 24/25/26) includes a pair of parallel chains (belts, 24/25/26), one of said

chains (24/25/26) being provided with a plurality of intermediate contact members (an intermediate foraminous portion of 27/28), said intermediate contact members being arranged in a laterally staggered position with respect to said longitudinal supporting element (15a/15b).

In regards to claim 24, Wierschke discloses wherein at least one of said first contact member or said second contact member designed to grasp said products includes jaws or pliers-shaped grasping members (alternatively mechanical fingers; see col. 6, lines 8-15).

In regards to claim 26, Wierschke discloses wherein said products are rolls (R) obtained from cutting a log (see abstract).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 12, 20-23, and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wierschke in view of Spencer (U.S. Patent 4,033,862).

Wierschke discloses that the contact members are comprised of a vacuum system, and as such does not disclose a system of contact members movable mounted orthogonal to the flexible member, acted on by a fixed control profile,

comprised of shoes or jaw shaped grasping members. However, Wierschke does recognize that it is feasible to replace the vacuum aspect of the invention with random mechanical fingers in a short area on each of the two belt or chain systems per lane and still retain the new quick product variability (col. 6, lines 8-15). However, Wierschke does not provide detail as to the structure of the mechanical fingers. Attention is therefore directed to the Spencer device that discloses a similar apparatus for conveying wound rolls wherein defective rolls are discarded / allowed to fall away from the contact members or finger grippers. One having ordinary skill in the art would have recognized the applicability of utilizing the Spencer finger grasping members as anticipated by Wierschke to similarly grasp and transport the rolls along the conveyor.

Therefore, in regards to claim 12, the Wierschke device as modified by Spencer discloses wherein a fixed control profile (Spencer; cam followers 53/54) acts on said movable portions (Spencer, fingers, 31/32/33), an elastic element (Spencer; spring, 43) being provided to hold each of said movable portions (19) in contact with said fixed control profile.

In regards to claim 20, the Wierschke device as modified by Spencer discloses wherein said first contact member (Spencer grippers, 19) designed to grasp the last product (Ru) (see Wierschke Figures 8A-8L) of each series of products includes two shoes (i.e. Fingers, 31/32/33) and means are provided to control a grasping motion of said shoes (i.e. cams followers 53/54, springs 43).

In regards to claim 21, the Wierschke device as modified by Spencer discloses wherein said second contact member (Spencer grippers, 19) designed

to grasp at least the first product (Rd) of each series of products includes two shoes (i.e. Fingers, 31/32/33) and means are provided to control a grasping motion of said shoes (i.e. cams followers 53/54, springs 43).

In regards to claim 22, the Wierschke device as modified by Spencer discloses wherein the two shoes (i.e. Fingers, 31/32/33) of said first contact member are controlled by a fixed cam profile (cam followers, 53/4), which controls a closing motion of said shoes.

In regards to claim 23, the Wierschke device as modified by Spencer discloses wherein said flexible member (i.e. 24/25/26) includes a pair of parallel chains (i.e. 24/25/26 / Spencer 20/21), one of said chains being provided with a plurality of intermediate contact members (mechanical fingers, Wierschke col. 6, lines 8-15 / Spencer fingers 31/32/33), said intermediate contact members being arranged in a laterally staggered position with respect to the longitudinal supporting element (i.e. 15a/ 15b) and wherein each shoe of said first contact member is carried by a respective one of said chains (i.e. 24/25/26 / Spencer 20/21).

In regards to claim 44, the Wierschke device as modified by Spencer discloses wherein said flexible member (i.e. 24/25/26) includes a pair of parallel chains (i.e. 24/25/26 / Spencer 20/21), one of said chains being provided with a plurality of intermediate contact members (mechanical fingers, Wierschke col. 6, lines 8-15 / Spencer fingers 31/32/33), said intermediate contact members being arranged in a laterally staggered position with respect to the longitudinal supporting element (i.e. 15a/ 15b) and wherein each shoe of said first contact

member is carried by a respective one of said chains (i.e. 24/25/26 / Spencer 20/21).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Publication 2003/80015077 to Betti et al., U.S. Patent 5,475,917 to Biagiotti, U.S. Publication 2004/0020343 to Gambini, U.S. Publication 2001/002285 to Gambini, U.S. Publication 2003/0167887 to Butterworth, U.S. Patent 6,332,527 to Wierschke, U.S. Patent 4,977,803 to Blom, U.S. Patent 4,462,287 to Weis et al., EP 1231320 to Progetti et al., EP 0668132 to Wunderlich.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Lee whose telephone number is (571) 272-8339. The examiner can normally be reached on Monday through Friday, 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on (571) 272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Art Unit: 3724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LML

11/20/2007


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SUPERVISORY PATENT EXAMINER